

IAP20 Rec'd PCT/PTO 24 JAN 2006

AMENDMENT UNDER PCT ARTICLE 34

With respect to International Application No. PCT/JP2004/010619, filed on July 26, 2004, the applicant 5 canceled sheet 6 of the Description entirely and submitted substitute sheets 6-1 and 6-2 of the Description which are attached hereto. Explanation of some related art documents is added (line 13 of sheet 6-1 to line 2 of sheet 6-2).

Engineers Technical Research Report MI2000-75, 2001,
pp.145-149

5 - Tsunashima H, Befu S, Arai Y "Stereoscopic Image Construction Method" (Japanese Patent Application No. 2000-358420), 2000

- Befu S, Tsunashima H, Arai Y: "A Study in 3-Dimensional Image Processing Method for 3 DX Multi Image Micro CT", CARS2001, 2001, pp.665-670

10 - Tsunashima H, Befu S, Yamada A, Arai Y: "3-Dimensional Image Construction Method In Small X-ray Calculated Tomography for Dental Use", Med. Imag. Tech. 21:157-165, 2003.

15 PCT International Application Publication No. WO02/43001 discloses a 3DX device which has been proposed by the present inventors.

20 Japanese Laid-Open Patent Application No. 02-118887 discloses a method for displaying a 3-dimensional image based on tomographic data. Specifically, data of an undesired object or missing are eliminated by using connectivity of tomographic data, and then data of a target object concerned are recognized by using selection of a specified region.

25 Japanese Laid-Open Patent Application No. 63-118990 discloses a method for generating a 3-dimensional image based on parallel slice data. In this method, a connectivity of 2-dimensional image portions between adjacent slice data is used to generate a 3-dimensional image.

30 The methods of Japanese Laid-Open Patent Applications No. 02-118887 and No. 63-118990 are related to the slice data correction processing, and there is no teaching in this document of calculating the integrated value of consecutive voxels in a 3-dimensional CT data

without changing the 3-dimensional CT data for the correction as in the present invention.

DISCLOSURE OF THE INVENTION

5 However, as for the methods in the above-mentioned documents, it is found as a result of examining the reconstructed 3-dimensional image that separation of a mandibular condyle head and a mandibular fossa in the reconstructed 3-dimensional image of a
10 mandible part is not performed adequately.

Accordingly, a general object of the present invention is to provide an image processing method in which the above-mentioned problems are eliminated.

15 A more specific object of the present invention is to provide an image processing method and a computer-readable recording medium in which an image processing program is recorded which is capable of performing separation of separate blocks in the reconstructed image of a 3-dimensional object adequately
20 when processing 3-dimensional CT data obtained from the 3-dimensional object.

25 In order to achieve the above-mentioned objects, the invention as claimed in claim 1 provides an image processing method which processes 3-dimensional CT data